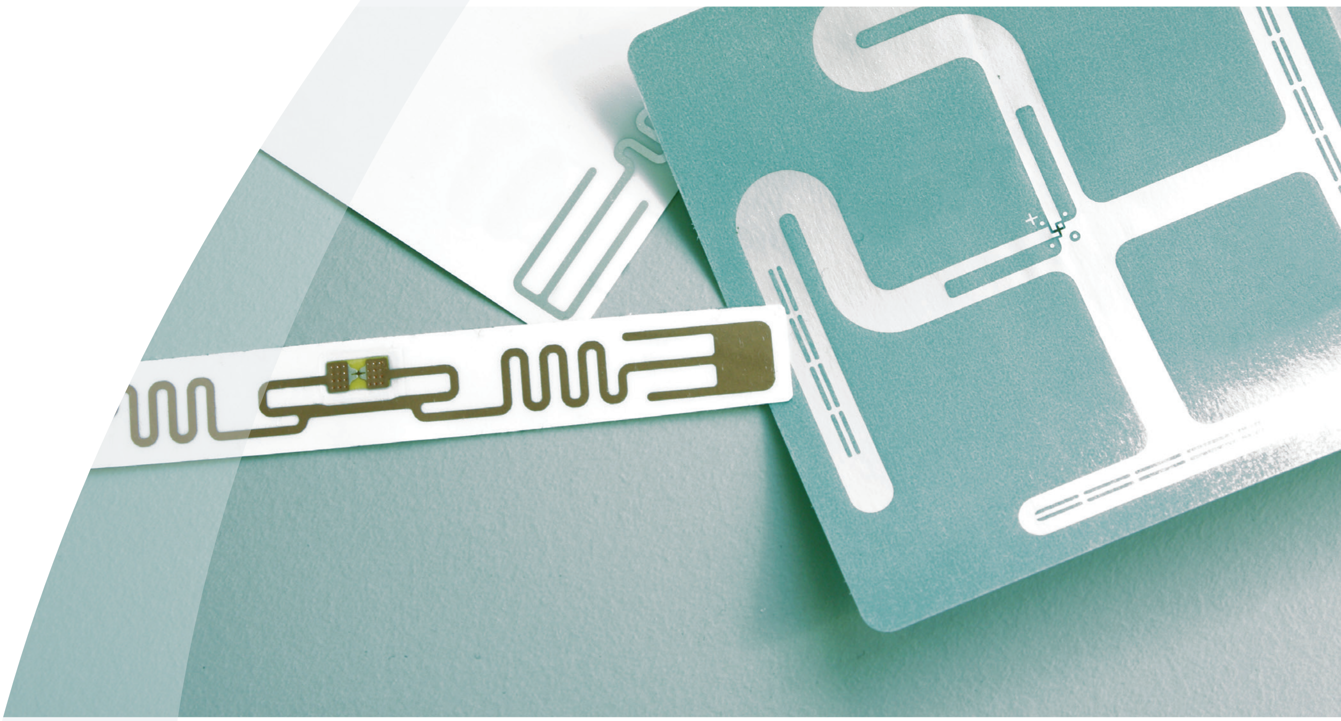
Kurt Salmon

The Compelling Case for RFID

The whole really is greater than the sum of its parts



RFID is quickly becoming one of the retail industry's hottest buzzwords, driven by several key applications: improving inventory accuracy and planning, preventing shrinkage, facilitating omnichannel fulfillment and enabling real-time customer-product interaction in stores.

Taken individually, they each present a fairly compelling business case for implementing RFID.

But when it comes to RFID, the whole is greater than the sum of its parts.

Beyond just the sales lift associated with improved inventory visibility, RFID has incredible ability to facilitate omnichannel fulfillment and improve the customer experience—both of which are rapidly becoming powerful competitive differentiators.

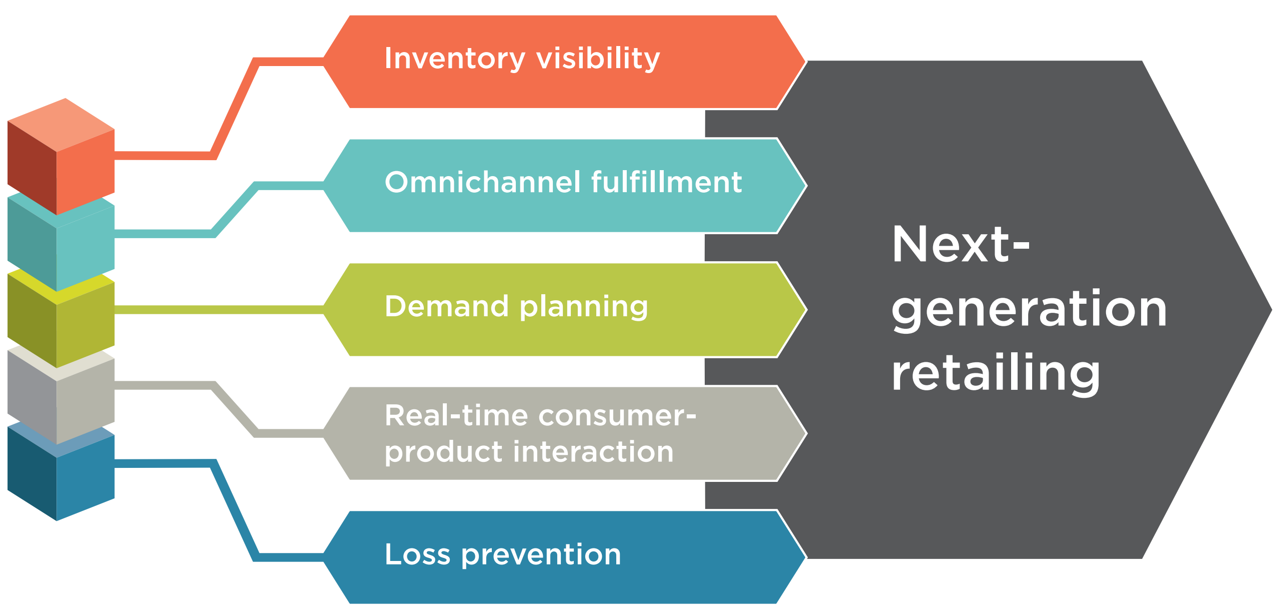
We believe RFID's real impact comes from looking at all of its potential benefits as a whole to demonstrate truly eye-opening value. Beyond just the sales lift associated with improved inventory visibility, RFID has incredible ability to facilitate omnichannel fulfillment and improve the customer experience—both of which are rapidly becoming powerful competitive differentiators.

Of course, not every application of RFID is right for every retailer. Below, we detail five key uses of RFID and their benefits.

Inventory visibility

Cycle counting regularly or placing RFID readers throughout the store can help provide near real-time feedback on what merchandise is out of stock on the floor so store associates can replenish it. RFID also helps speed inventory counting from about 200 units per hour to about 14,000 units per hour, which means that inventory can be counted more frequently and replenished more often. This also corresponds to a steep reduction in labor requirements, freeing up store labor to focus on improving customer engagement.

This application can drive significant benefits. Harvard Business School found that 8% of all retail items are out of stock at any given time, costing more than $69 billion annually. Our experience shows this number can be much higher, up to 15% to 20% for items with many size or color combinations. But RFID reduces the likelihood of out-of-stocks by 60% to 80%, according to ABI Research, as earlier detection of store-level out-of-stocks allows for quicker replenishment of floor merchandise and backroom stock through the retailer's supply chain, both of which lead to increased sales. Sales lift varies based on how substitutable any given product is, but ranges from 3% to 10%. For example, one global specialty apparel retailer saw sales increase 4% per store, which translated into $2.5 billion in additional revenue across its entire store fleet.



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In addition to reducing out-of-stocks, RFID helps improve AUR. Today, backroom and floor stocks are not inventoried as frequently as they should be, resulting in a substantial amount of merchandise that never sees the light of day. In fact, in one pilot, 30% of merchandise was "found" only in time to move it to the clearance rack. If that merchandise had been located on the day it went out of stock on the floor, its AUR would have increased by 3% to 5%.

Omnichannel fulfillment

Improved real-time inventory visibility also enables retailers to deliver omnichannel fulfillment with confidence. In stores, sales associates armed with mobile devices can quickly and accurately check chain-wide availability, saving the sale on out-of-stock items and giving consumers access to products that are not available in that particular store. Online, accurate inventory counts enable ship-from-store and click-and-collect programs.

These efforts not only save money on shipping costs, they help boost sales by increasing product availability. For example, online sales at American Apparel have increased by 30% since they started using their stores as backup fulfillment centers. And Nordstrom attributes a 39% online sales bump to efforts to integrate its online and in-store inventories. This use of RFID also increases full-price sales by enabling fulfillment from stores with excess inventory, thereby avoiding markdowns.

Demand planning

The insights from more accurate inventory visibility can also enable better real-time inventory replenishment to stores. Plus, they can be applied earlier in the merchandising and planning process to create more precise buying and allocation operations.

WHEN RFID DOESN'T MAKE SENSE

Certain categories, like low-AUR products or high-fashion, seasonal items with a one-time push, may not be the best fit to take advantage of some of RFID's benefits.

But other technologies can still deliver the inventory accuracy, demand planning and customer experience benefits of RFID.

Smart shelves. Smart shelves use light-sensing technology to detect how long customers stand next to a particular product, whether they pick it up and for how long, and which item they pick up next. This technology can provide insights about which products consumers prefer in head-to-head comparisons and how consumers make decisions within a given product category. And since the shelves can detect when they are empty, they can alert retailers or manufacturers when a restock is in order.

In-aisle tracking. Currently used most in grocery and drug stores, in-aisle tracking is made possible by sensors placed in key locations that monitor shopping times, what consumers touch and what they put into their carts. This technology can help assess competing promotions or layouts, and its heat-map output will show high-traffic areas.

Smart carts. Smart carts enable customers to bring the shopping list they've created online onto a screen on their shopping cart. While they are in the store, sensors on their cart track their shopping patterns and show them ads and promotions based on the cart's location and could also show them relevant additional purchases based on the items in their cart—and on their list—and what other customers have purchased in that aisle. These efforts are aimed at increasing impulse purchases, which account for roughly 40% of all supermarket purchases.

RFID's ability to enable omnichannel fulfillment and a compelling, personalized customer experience—two essential pieces of the modern retailing puzzle—creates a powerful value proposition beyond just sales increases.

This will improve stores' inventory positions and reduce the need for markdowns, increasing margins. In some cases, retailers will also find that this more scientific approach to demand planning means they have to buy less in the first place. For example, one national department store chain anticipates reducing inventory by 1% while sales grow 4% to 5%.

Real-time consumer-product interaction

RFID, paired with dynamic displays, can help improve customer engagement and increase cross-sell opportunities by showing shoppers information relevant to the product they're holding, the store they're in, and their personal history and preferences. These displays can also show customers how they would look in different colors of the same garment without having to try it on—as Uniqlo does with its Magic Mirror.

Our research at several specialty apparel retailers shows that investing in creating these kinds of compelling, personalized customer experiences can improve conversion rates by 40% to 60% and increase cross-sell opportunities by 15% to 25%.

Loss prevention

According to the University of Florida, retailers lose more than $37 billion annually to shrinkage. But item-level RFID can double as an electronic article surveillance tool by providing detailed information about the exact items moving through a read point.

American Apparel's 120 RFID-enabled stores operate at 99.8% inventory accuracy and shrinkage has been cut by an average of 55%.

Clearly, RFID can pay significant dividends for some retailers, especially as implementation costs continue to fall. But for many retailers, the most compelling argument for RFID comes not from one specific benefit, but from taking a holistic look at all it can do. RFID's ability to enable omnichannel fulfillment and a compelling, personalized customer experience—two essential pieces of the modern retailing puzzle—creates a powerful value proposition beyond just sales increases. ❖

AUTHORS

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